MONTHLY BULLETIN

OF

# THE OBSERVATORY

## AMERICAN UNIVERSITY OF BEIRUT

FORMERLY

SYRIAN PROTESTANT COLLEGE

BEIRUT, SYRIA

LAT. 33° 54′ 22″ N.

LONG. E. FROM GREENWICH 35° 28′ 10″

MARCH, 1933

J. A. BROWN, DIRECTOR

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# MARCH 1933
# METEOROLOGICAL REGISTER

| Date | Barometer reduced to o°C Sea level and 45° Latitude 700 mm+... | | | | Thermometer Cent. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 8:30 | 14:30 | 20:30 | Mean | Max. | Min. | 8:30 | 14:30 | 20:30 | Mean |
| 1 | 58.1 | 56.0 | 53.2 | 58.5 | 23.0 | 15.5 | 19.4 | 22.7 | 17.1 | 19.7 |
| 2 | 7.0 | 8.0 | 61.8 | 8.9 | 18.4 | 15.3 | 16.6 | 18.2 | 15.9 | 16.9 |
| 3 | 60.1 | 61.1 | 3.1 | 61.4 | 15.7 | 12.3 | 14.3 | 12.2 | 12.1 | 12.9 |
| 4 | 5.9 | 6.0 | 8.1 | 6.6 | 14.3 | 8.5 | 12.7 | 13.9 | 11.0 | 12.5 |
| 5 | 9.9 | 8.9 | 8.9 | 9.2 | 16.1 | 8.2 | 13.4 | 15.2 | 11.1 | 13.2 |
| 6 | 69.0 | 68.3 | 67.8 | 68.4 | 17.8 | 10.2 | 14.7 | 17.2 | 14.3 | 15.4 |
| 7 | 8.4 | 3.8 | 2.9 | 5.0 | 18.5 | 12.4 | 16.7 | 17.7 | 16.1 | 16.8 |
| 8 | 1.1 | 0.1 | 0.7 | 0.6 | 20.7 | 12.9 | 16.4 | 19.9 | 14.9 | 17.1 |
| 9 | 1.8 | 1.3 | 0.6 | 1.2 | 20.0 | 13.1 | 16.4 | 19.5 | 16.2 | 17.4 |
| 10 | 1.1 | 58.8 | 57.0 | 59.0 | 20.7 | 12.8 | 17.5 | 19.4 | 15.9 | 17.6 |
| 11 | 53.6 | 49.3 | 47.0 | 50.0 | 23.3 | 15.7 | 21.3 | 20.2 | 15.8 | 19.2 |
| 12 | 3.7 | 55.7 | 57.5 | 55.6 | 17.6 | 11.7 | 13.8 | 16.4 | 13.6 | 14.6 |
| 13 | 9.8 | 9.7 | 61.4 | 60.3 | 15.9 | 11.2 | 13.8 | 15.5 | 12.2 | 13.8 |
| 14 | 62.5 | 61.8 | 2.3 | 2.2 | 15.3 | 10.0 | 13.9 | 15.6 | 10.0 | 12.5 |
| 15 | 4.2 | 4.7 | 5.6 | 4.8 | 14.9 | 8.5 | 11.6 | 12.2 | 9.7 | 11.2 |
| 16 | 67.2 | 65.0 | 65.4 | 65.9 | 16.9 | 8.0 | 14.2 | 15.5 | 13.2 | 14.3 |
| 17 | 2.6 | 59.4 | 57.2 | 59.7 | 19.7 | 11.4 | 15.0 | 18.3 | 16.3 | 16.5 |
| 18 | 2.7 | 2.6 | 4.3 | 3.2 | 21.8 | 14.8 | 19.1 | 20.4 | 16.5 | 18.6 |
| 19 | 7.5 | 8.4 | 60.3 | 8.7 | 19.5 | 14.6 | 17.8 | 19.1 | 14.4 | 17.1 |
| 20 | 60.3 | 9.3 | 0.2 | 9.9 | 17.4 | 12.2 | 13.1 | 13.7 | 11.5 | 12.8 |
| 21 | 61.9 | 62.7 | 64.8 | 63.1 | 18.7 | 9.6 | 13.8 | 18.3 | 13.2 | 15.1 |
| 22 | 5.0 | 3.1 | 3.6 | 3.9 | 18.4 | 12.0 | 17.0 | 18.7 | 14.9 | 16.9 |
| 23 | 1.5 | 59.8 | 0.4 | 0.6 | 20.6 | 11.8 | 16.8 | 20.0 | 15.6 | 17.5 |
| 24 | 0.0 | 9.7 | 1.4 | 0.4 | 20.0 | 14.0 | 17.7 | 19.0 | 13.8 | 16.8 |
| 25 | 4.1 | 64.2 | 4.8 | 4.4 | 15.6 | 10.0 | 12.7 | 15.5 | 13.4 | 13.9 |
| 26 | 64.2 | 63.9 | 65.8 | 64.6 | 16.8 | 10.2 | 12.6 | 15.9 | 12.8 | 13.8 |
| 27 | 5.7 | 3.6 | 2.8 | 4.0 | 18.3 | 10.2 | 15.8 | 17.6 | 13.5 | 15.6 |
| 28 | 59.2 | 56.7 | 54.4 | 56.8 | 20.8 | 11.8 | 17.2 | 18.4 | 16.9 | 17.5 |
| 29 | 6.0 | 6.9 | 9.1 | 7.3 | 20.6 | 15.0 | 18.3 | 19.5 | 15.6 | 17.9 |
| 30 | 9.2 | 6.7 | 6.4 | 7.4 | 20.3 | 13.4 | 17.5 | 18.9 | 15.6 | 17.4 |
| 31 | 5.6 | 6.3 | 7.8 | 6.6 | 19.6 | 12.3 | 16.9 | 19.1 | 15.2 | 17.1 |
| | 761.25 | 760.35 | 760.85 | 760.82 | 18.65 | 11.93 | 15.75 | 17.47 | 14.14 | 15.79 |

Barometer, Range for month 747.0—769.9 m.m.
,, 50-yr. average for month 761.163 m.m.
Thermometer, Range for month 8.°0—23.°0 C.
,, 50-yr. average for month 16.°19 C.
Rain, Total for month 72.63 m.m.
,, , 50-yr average for month 98.30 m.m.
,, , total Sept. 1st to end of month 350.01 m.m.
,, , 50-yr. average, Sept. 1st to end of month 826.02 m.m

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# METEOROLOGICAL REGISTER

| Day | Wet Bulb Cent. | | | Elasticity of Vapor m.m. | | | | Relative Moisture per cent. | | | | Sun hrs. | Rain m.m. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8.30 | 14.30 | 20:30 | 8:30 | 14:30 | 20:30 | Mean | 8:30 | 14:30 | 20:30 | Mean | | |
| 1 | 16.9 | 17.3 | 15.6 | 12.6 | 11.4 | 12.4 | 12.1 | 76 | 55 | 83 | 71 | 1.2 | |
| 2 | 14.6 | 15.4 | 13.5 | 11.0 | 11.3 | 10.0 | 10.8 | 78 | 73 | 75 | 75 | 2.0 | 2.16 |
| 3 | 11.7 | 10.7 | 8.1 | 8.7 | 8.7 | 6.2 | 7.9 | 72 | 83 | 59 | 71 | 1.8 | 1.52 |
| 4 | 7.0 | 8.3 | 7.7 | 5.1 | 5.7 | 6.2 | 5.7 | 46 | 49 | 65 | 53 | 9.7 | |
| 5 | 9.7 | 10.9 | 8.6 | 7.1 | 7.5 | 7.0 | 7.3 | 62 | 58 | 72 | 64 | 9.5 | |
| 6 | 11.1 | 13.5 | 12.1 | 8.0 | 9.4 | 9.3 | 8.9 | 64 | 65 | 77 | 69 | 9.5 | |
| 7 | 12.7 | 15.1 | 14.9 | 9.9 | 11.1 | 11.9 | 11.0 | 71 | 74 | 88 | 78 | 9.5 | |
| 8 | 14.3 | 16.6 | 13.4 | 10.7 | 11.8 | 10.5 | 11.0 | 78 | 69 | 84 | 77 | 7.2 | |
| 9 | 14.3 | 16.2 | 14.9 | 10.8 | 11.5 | 11.7 | 11.3 | 78 | 69 | 86 | 78 | 9.4 | |
| 10 | 15.0 | 16.5 | 14.7 | 10.9 | 12.1 | 11.6 | 11.5 | 72 | 72 | 86 | 77 | 6.0 | |
| 11 | 13.4 | 14.3 | 14.1 | 7.6 | 9.0 | 10.8 | 9.1 | 38 | 51 | 82 | 57 | 0.0 | 3.81 |
| 12 | 12.8 | 13.6 | 11.8 | 10.4 | 9.9 | 9.2 | 9.8 | 89 | 72 | 79 | 80 | 3.7 | 17.28 |
| 13 | 10.7 | 11.0 | 9.0 | 7.9 | 7.5 | 6.9 | 7.4 | 66 | 57 | 65 | 63 | 5.0 | 2.92 |
| 14 | 10.8 | 9.9 | 7.7 | 7.9 | 7.3 | 6.7 | 7.3 | 67 | 63 | 73 | 68 | 3.6 | 2.79 |
| 15 | 6.9 | 7.9 | 6.5 | 5.3 | 6.0 | 5.7 | 5.7 | 53 | 56 | 64 | 58 | 8.0 | |
| 16 | 9.9 | 11.3 | 10.4 | 7.0 | 7.8 | 8.0 | 8.6 | 58 | 60 | 70 | 63 | 10.0 | |
| 17 | 12.8 | 14.4 | 13.4 | 9.6 | 9.9 | 9.7 | 9.7 | 76 | 63 | 71 | 70 | 4.9 | |
| 18 | 14.2 | 17.1 | 14.7 | 9.3 | 12.3 | 11.2 | 10.9 | 57 | 69 | 80 | 69 | 6.5 | |
| 19 | 14.9 | 16.1 | 12.2 | 10.8 | 11.6 | 9.4 | 10.6 | 72 | 72 | 77 | 74 | 7.2 | |
| 20 | 12.2 | 12.3 | 11.0 | 10.1 | 9.7 | 9.5 | 9.8 | 90 | 84 | 94 | 89 | 2.6 | 16.0 |
| 21 | 11.6 | 14.7 | 11.5 | 8.8 | 10.3 | 9.2 | 9.4 | 75 | 64 | 81 | 73 | 7.4 | 9.14 |
| 22 | 13.8 | 15.5 | 13.2 | 9.8 | 11.0 | 10.2 | 10.3 | 69 | 70 | 81 | 73 | 0.0 | |
| 23 | 13.5 | 15.4 | 12.8 | 9.6 | 10.4 | 9.4 | 9.8 | 68 | 59 | 71 | 66 | 10.0 | |
| 24 | 14.6 | 14.6 | 11.7 | 10.5 | 9.7 | 9.0 | 9.7 | 70 | 60 | 76 | 69 | 8.6 | 6.09 |
| 25 | 10.0 | 12.8 | 9.8 | 7.7 | 9.4 | 7.3 | 8.1 | 70 | 71 | 64 | 68 | 5.5 | 8 13 |
| 26 | 11.1 | 11.7 | 9.4 | 8.9 | 8.0 | 7.1 | 8.0 | 82 | 59 | 65 | 69 | 3.7 | 2.79 |
| 27 | 10.6 | 12.5 | 10.0 | 6.9 | 8.1 | 8.2 | 7.7 | 52 | 54 | 70 | 59 | 9.5 | |
| 28 | 12.6 | 14.9 | 15.7 | 8.4 | 10.5 | 12.4 | 10.4 | 58 | 68 | 86 | 71 | 7.0 | |
| 29 | 14.7 | 16.7 | 14.4 | 10.5 | 12.0 | 11.5 | 11.3 | 66 | 69 | 88 | 74 | 9.2 | |
| 30 | 15 0 | 15.6 | 15.9 | 10.9 | 11.0 | 10.8 | 10.9 | 72 | 68 | 83 | 74 | 9.1 | |
| 31 | 13.7 | 15.3 | 13.4 | 9.8 | 10.6 | 9.2 | 9.9 | 69 | 65 | 71 | 68 | 10.1 | |
| | 12.52 | 13.81 | 11.90 | 9.07 | 9.75 | 9.29 | 9.37 | 68.2 | 65.2 | 76.5 | 69.9 | 6.36 | 2.34 |

ight of Barometer above sea level: 33.7 meters.
„ „ Thermometers above ground:
y and wet 1.55 m.; Max. 1.75 m.; Min. 1.70 m
m of Rain Gauge: above ground 0.56 m.; above sea level 30.31 m.
me of readings minus 2 hours equals G. C. T.
-year averages are for period, 1875-1924

# MARCH 1933

## METEOROLOGICAL REGISTER

| Date | Clouds. Clear—0 Overcast—10 | | | | Direction and force of Wind 0—10 | | | Wind per day | Sea | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| | 8:30 | 14:30 | 20:30 | Mean | 8:30 | 14:30 | 20:30 | Km. | | |
| 1 | 10cu | 10cu | 10ci | 10.0 | 0 | 0 | 0 | 334.7 | mod. | |
| 2 | 10ni | 9cu | 10cu | 9.7 | 1w | 0 | 2w | 585.8 | „ | |
| 3 | 10ni | 10ni | 3cu | 7.7 | 3w | 2n | 4ne | 214.8 | stormy | |
| 4 | 1cu | 0 | 0 | 0.3 | 3n | 4n | 3n | 507.7 | mod. | |
| 5 | 2cicu | 1cu | 1ci | 1.3 | 1n | 1n | 0 | 61.1 | slight | |
| 6 | 0 | 1st | 0 | 0.3 | 0 | 1n | 1w | 361.5 | mod. | |
| 7 | 3ci | 2ci | 8st | 4.3 | 1n | 3ne | 4ne | 159.9 | „ | |
| 8 | 8st | 10ci | 5ci | 7.7 | 1n | 0 | 0 | 268.0 | „ | heavy dew at nig |
| 9 | 1ci | 1cu | 9cu | 3.7 | 0 | 1n | 1ne | 117.5 | light | |
| 10 | 7st | 10ci | 10stcu | 9.0 | 1w | 0 | 0 | 245.7 | mod. | dew at night |
| 11 | 10stcu | 10ni | 10ni | 10.0 | 0 | 1w | 4ne | 681.3 | „ | |
| 12 | 5ci | 10ni | 10ni | 8.3 | 3ne | 1n | 0 | 331.2 | „ | |
| 13 | 5cu | 3cu | 9cu | 5.7 | 2nw | 4nw | 3nw | 952.6 | rough | |
| 14 | 10ni | 9cu | 10ni | 9.7 | 4w | 4w | 5sw | 859.4 | stormy | |
| 15 | 8cu | 4cu | 5cu | 5.7 | 4w | 1nw | 0 | 386.2 | „ | |
| 16 | 0 | 0 | 0 | 0.0 | 1n | 3n | 0 | 313.5 | „ | |
| 17 | 10cu | 2stcu | 1ci | 4.3 | 0 | 1n | 0 | 235.5 | mod. | |
| 18 | 10cu | 0 | 2cu | 4.0 | 1n | 1n | 1n | 425.3 | „ | mist at noon |
| 19 | 0 | 6cu | 2cu | 2.7 | 3sw | 3sw | 0 | 810.5 | „ | heavy mist a.m. |
| 20 | 10ni | 10ni | 10ni | 10.0 | 1w | 2sw | 1w | 385.7 | slight | light th. st. at nig |
| 21 | 2cu | 1cu | 0 | 1.0 | 1n | 1n | 0 | 320.9 | stormy | |
| 22 | 1cu | 1cu | 2cu | 1.3 | 1n | 2sw | 0 | 340.9 | slight | |
| 23 | 1ci | 0 | 0 | 0.3 | 0 | 1w | 0 | 181.5 | calm | |
| 24 | 1cu | 2cu | 4ni | 2.3 | 2w | 2w | 5sw | 743.4 | stormy | |
| 25 | 7cu | 8cu | 6cu | 7.0 | 1w | 0 | 2sw | 767.6 | „ | |
| 26 | 9ni | 5cu | 4ci | 6.0 | 1sw | 3sw | 1sw | 104.9 | mod. | |
| 27 | 2st | 9ci | 0 | 3.7 | 0 | 1w | 1w | 359.3 | slight | |
| 28 | 6stcu | 10ci | 8ci | 8.0 | 0 | 2n | 2w | 156.9 | mod. | |
| 29 | 1cu | 2cu | 2cu | 1.7 | 3sw | 2w | 1w | 692.0 | slight | |
| 30 | 3cu | 6cu | 6cu | 5.0 | 2w | 1w | 1w | 560.4 | mod. | |
| 31 | 1cu | 1cu | 0 | 0.7 | 1w | 1w | 1w | 241.1 | slight | |
| | | | | 4.88 | 1.4 | 1.6 | 1.4 | 409.90 | | |

### Number of Daily Wind Observations

| Time | N | NE | E | SE | S | SW | W | NW | Calm |
|---|---|---|---|---|---|---|---|---|---|
| 8:30 | 8 | 1 | 0 | 0 | 0 | 3 | 10 | 1 | 8 |
| 14:30 | 11 | 1 | 0 | 0 | 0 | 4 | 8 | 2 | 5 |
| 20.30 | 2 | 4 | 0 | 0 | 0 | 4 | 8 | 1 | 12 |
| **Totals** | 21 | 6 | 0 | 0 | 0 | 11 | 26 | 4 | 25 |

**Number of days with rain 11, fog 2, thunderstorms 1, gales 0.**

**50-yr average number of days with rain during month 10.9**